B6200-2 11/3/82

World Financial Markets

Morgan Guaranty Trust Company of New York

November 1982

U.S. monetary policy shift: reasons and implications, 1

New German government policies and the mark, 5

Statistical appendix, 9

U.S. monetary policy shift: reasons and implications

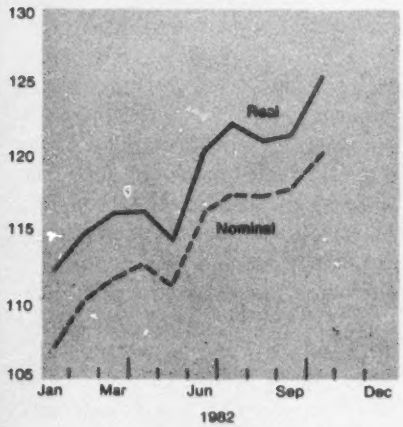
Amid all the pessimism about the world economy and the stability of the international financial system, the recent easing of monetary policies in the United States and other major industrial countries has been an important positive development. The move was led by the Federal Reserve, which lowered its discount rate by half of a percentage point to 9½% following the October meeting of the Federal Open Market Committee. Chairman Volcker announced that in coming months the Federal Reserve will attach much less weight to movements in M1, the money supply measure that for the past three years has been considered the principal target of U.S. monetary policy. Instead of relying on M1 the authorities will upgrade the importance of two broader aggregates, M2 and M3.

The Federal Reserve's heavy emphasis since October 1979 on controlling money supply growth was instrumental in reducing the rate of inflation and inflationary expectations and in reestablishing the credibility of the U.S. central bank. But, with inflation and real output decelerating much more rapidly than expected, the time had come to reassess whether monetary policy — particularly the target growth rates established for M1 in 1982 following the undershoot of M1 in 1981 — were more restrictive than intended.

Similarly, in 1981 the British authorities put aside their previous emphasis on a single monetary target. Despite overshooting of sterling M3 by wide margins, the economy was in severe difficulties, exacerbated by a grossly overvalued, albeit by then depreciating, exchange rate. Moreover, a protracted civil service dispute rendered the M3 figures substantially useless for short-term assessment. Instead, the exchange rate became a principal indicator and target of policy, backed by a range of monetary aggregates and by renewed sensitivity to inflation and real economic indicators. The more flexible British approach has not triggered acceleration of money supply and inflation. Nor would such flexibility in the United States be likely to rekindle inflationary pressures or fears.

The recent Federal Reserve actions have not weakened the dollar. On the contrary, it has reached a new all-time high on an effective basis, and it is now some 25%

Real and nominal effective dollar exchange rates
index numbers, 1975–79=100



Selected U.S. interest rates
in percent

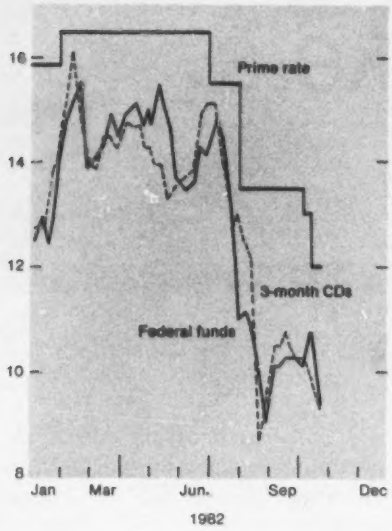


Table 1

*Short-term money markets rates**
in percent

	1982		
	end-June	*end-Sept.*	*latest*
United States	15.2	10.3	8.7
Canada	17.2	13.0	11.6
Japan	7.2	7.1	7.0
Belgium	15.8	13.0	12.8
France	14.9	13.8	13.2
Germany	9.4	8.0	7.2
Italy	20.4	18.5	18.8
Netherlands	8.9	7.9	6.8
United Kingdom	13.0	10.4	9.2

*Representative money market rates shown in key to statistical appendix.

Table 2

Central bank discount rates
in percent

	1982		
	end-June	*end-Sept.*	*latest*
United States	12.00	10.00	9.50
Canada	16.58	13.18	13.18
Japan	5.50	5.50	5.50
Austria	6.75	6.25	5.75
Belgium	14.00	13.00	12.50
France	9.50	9.50	9.50
Germany	7.50	7.00	6.00
Italy	19.00	18.00	18.00
Netherlands	8.00	7.00	6.00
United Kingdom	12.50	10.50	10.50

above its average level in the second half of the 1970s on a real effective basis (see chart). Some observers are surprised about the dollar's strength in the wake of declining nominal U.S. interest rates (see chart). In real terms, however, U.S. rates remain very high. The dollar's strength largely reflects confidence in U.S. economic policies and long-term prospects in relation to those of other industrial countries as indicated by sizable long-term capital flows into this country. It also stems from a better-than-expected performance of the U.S. current account, which, as measured, remains close to equilibrium. Exports of goods and, to an even greater degree, services are substantially underreported and are captured in the large statistical discrepancy of the U.S. balance of payments, which exceeded $25 billion last year.

In addition, the dollar has benefited from declines in foreign interest rates. European money market rates are now down by 1½-4 percentage points since June of this year, leaving short-term interest rate differentials still favoring the dollar (see Table 1). With unemployment in Europe at record levels and inflation decelerating, some European officials have become a bit more predisposed toward a strong dollar. German officials, in particular, feel more relaxed about the mark in relation to the dollar now that the former has strengthened against other European currencies and the yen and is once again back to its average level of the second half of the 1970s on a real effective basis (see accompanying article). Following the latest Federal Reserve actions, the German and Dutch central banks cut their discount rates by a full percentage point, and those of Belgium and Austria lowered theirs by half a percentage point (see Table 2).

Factors behind the Federal Reserve shift

For some time, the Federal Reserve has felt hamstrung by the commitment to a particular money supply target that had become increasingly less reliable as an indicator of monetary policy. The Federal Reserve has indicated that it would respond more flexibly this year than in the two preceding years to short-run — especially week-to-week — deviations in the money supply from the target ranges. It has stressed that such a posture is warranted in view of the difficulties that financial innovations, regulatory changes, and possible shifts in liquidity preference pose for measuring money and for interpreting fluctuations in such measures. With the proliferation of interest-bearing deposits with various checkable privileges and different degrees of "moneyness," it has become increasingly difficult to distinguish deposits that serve transactions purposes from those that do not.

In announcing the Federal Reserve's decision to downgrade M1 temporarily as an intermediate target, Chairman Volcker noted that some $33 billion in All Savers Certificates (which carried important tax privileges) were maturing in October and that the recently enacted Depository Institutions Act of 1982 permits new money-fund type accounts at banks and thrift institutions before year-end. As a result, M1 growth in the months ahead could be even more volatile than in the past, as individuals shift funds through their checking accounts, which are included in M1, among All Savers Certificates, money market funds, and the new deposit instruments, which are not. In contrast, M2 and M3, which include all of these instruments, will be relatively unaffected. Accordingly, it is felt that in present circumstances

the broader aggregates are more appropriate indicators of and targets for monetary policy.

The Federal Reserve actions also reflected increasing recognition that the targets of 2½%-5½% established for M1 growth this year may have become too restrictive. This year's target range was based on the average level of M1 during the fourth quarter of 1981, which was below the lower end of last year's target range. If, instead, the midpoint of last year's target range had been used as the base level, M1 would now be well within target. Moreover, when this year's targets were announced, it was assumed that the velocity of M1 would grow at close to its trend rate of 3%-3½% per annum and that this would allow for nominal income growth of up to 8½%-9% (fourth quarter-to-fourth-quarter). Instead, velocity growth of M1 (and also M2) has been negative, and growth of nominal income has turned out to be much less than expected — less than 4% in the past four quarters.

Throughout this year, the Federal Reserve adjusted monetary policy gradually to offset the downward base drift of M1 and the unexpected movements of velocity. Early this year, it stated that it would be aiming for the upper end of the M1 target range, instead of the customary midpoint, and at the midyear review Chairman Volcker indicated that a modest overshoot of M1 would be acceptable. The latest decision to downgrade M1 temporarily as an indicator has increased the Federal Reserve's room to maneuver. The immediate effect was to enable the 7%-11% range for Federal funds established at the September FOMC meeting to be maintained despite the current bulge in M1. If M1 remains above this year's target range, it could also provide for a higher average level of M1 in 1983, since the base used to compute the 1983 targeted levels of money supply is the average level of balances in the current quarter.

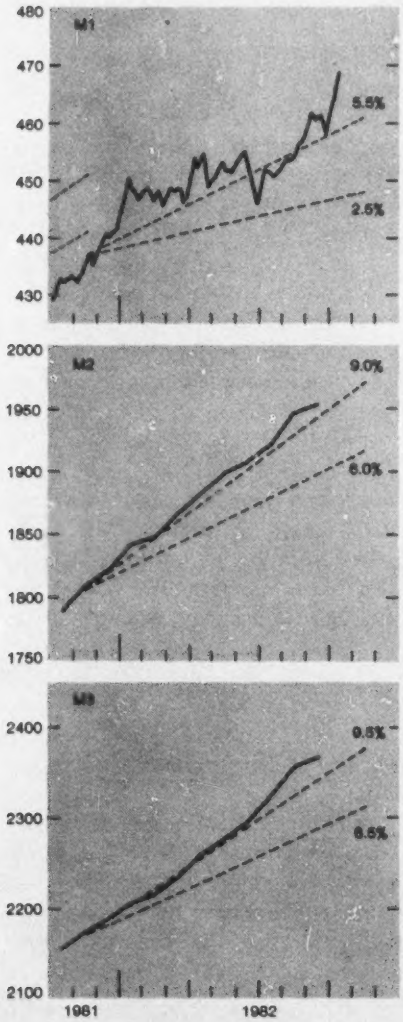
A third consideration behind the Federal Reserve's actions was the strong dollar and the potential adverse implications of continued dollar appreciation for the U.S. economy and international trade. A recent Federal Reserve Bank of New York study concludes that, all other things being equal, by the end of next year a 20% nominal appreciation of the dollar will result in a level of U.S. exports that is roughly $35 billion lower, and a level of U.S. imports that is about $10 billion higher, than would have prevailed in the absence of the dollar's appreciation. The implied net U.S. trade balance deterioration of $45 billion represents about 1.5% of GNP.

As noted earlier, the U.S. current account in 1982 is likely to be close to balance. However, during the coming year an eroding U.S. competitive position and a weak economic environment in the industrial countries and the developing countries could lead to significant U.S. current account deterioration and act as a further depressant on the economy. Should the dollar fail to respond to such a development, it could lead to increased trade frictions and protectionism. Relations with Japan, in particular, are at stake, with the yen on a real effective basis almost 20% below its average level in the second half of the 1970s.

Assessment of the Federal Reserve actions

The recent Federal Reserve moves were undertaken at a time of considerable uncertainty in financial markets about how the U.S. authorities would respond to an expected bulge in M1. While the discount rate cut and downgrading of M1 as a

U.S. money supply and target ranges
in billions of dollars



policy indicator have reduced fears that monetary policy will be tightened in the near term, there is still considerable debate about whether the latest actions signal an end of aggregate targeting, as some observers have contended.

The Federal Reserve clearly has been highly accommodative in supplying reserves in nonborrowed form to the banking system at a progressively lower Federal funds rate at a time when the principal measures of money supply are all above target (see chart). In the latest 13 weeks, for example, nonborrowed reserves increased at a 17% annual rate over the previous 13 weeks, and total reserves expanded at a 13% rate (see chart). By contrast, in early summer the Federal Reserve responded to an expected bulge in M1 by reducing nonborrowed reserves. Such action forced banks to satisfy their reserve requirements through increased borrowings at the discount window as the Federal funds rate increased sharply. In this respect, there has been an easing of monetary policy lately.

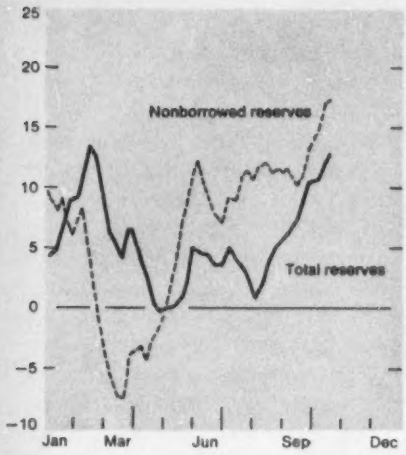
There is no sign, however, that monetary policy has become actively stimulative. Under the current reserve accounting procedures, required reserves are predetermined by the level of reservable deposits two weeks prior to the period of settlement. Consequently, any noticeable provision of reserves in excess of those required would be a clear signal that monetary policy has become overtly expansionary. As yet, excess reserves have not spurted abruptly. Moreover, borrowings from the discount window have not been actively encouraged. Discount rate cuts have followed reductions in the Federal funds rate and other money market rates, rather than leading them.

Similarly, there is little to indicate that the Federal Reserve has abandoned aggregate targeting altogether in favor of interest rate targeting. In announcing the decision to downgrade M1 as an indicator, Chairman Volcker pointed out the dangers of using interest rates as a target of monetary policy, especially in an environment in which there are diverse inflation expectations. Moreover, he stressed that the Federal Reserve will be placing greater emphasis in the future on the broader monetary aggregates. Since they are available only on a monthly basis, it is hoped that less attention will be focused on week-to-week movements in M1 and other available components of the broader aggregates.

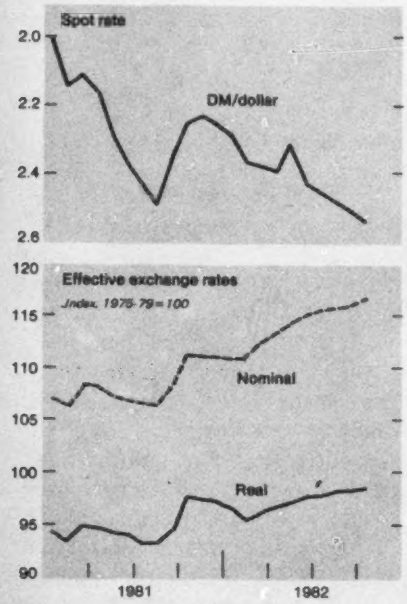
While both M2 and M3 currently are above the upper end of their respective target ranges, their growth has been slowing recently and is expected to continue to do so for a while longer partly as a result of the low growth of nominal income. The slowing also reflects the effects that a reduction of interest rates and, possibly, concerns about financial safety are having in moderating the growth of uninsured money market funds. More generally, lower interest rates can be expected to induce shifts from high-yielding deposits into lower-yielding and noninterest bearing deposits, implying a slowing in the growth of the broader aggregates.

Nevertheless, there does appear to be some basic rethinking about the need for greater flexibility in setting numerical targets for money supply growth during the transition period to an environment of lower inflation. The provisional money supply growth targets for 1983 are unchanged from those in 1982, but the Federal Reserve will be aiming for the midpoint of the targets instead of the upper range. They implicitly assume that economic recovery would be aided by a return to more normal velocity behavior.

Total and nonborrowed reserves
13-week growth rates
in percent per annum



German mark
monthly averages except latest plotting



In past cycles, velocity tended to move pro-cyclically, with velocity growth accentuating nominal income growth in the upturn. Except in the 1975 recovery, such velocity behavior occurred in response to rises in nominal interest rates during economic expansions. However, it is questionable whether this will be the case in the next upturn if nominal interest rates recede further as a result of declining inflation expectations. The authorities, therefore, will have to watch very carefully how velocity responds to the transition to low inflation in assessing whether the stated money supply targets are appropriate. If velocity growth were to remain well below the historic trend, an upward adjustment of the 1983 money supply targets could be required to allow for economic recovery.

One factor that will restrain a more stimulative monetary policy is the substantial budget deficit overhang. Even with the passage last summer of the three-year $98 billion tax package, it is estimated that the *combined* budget deficit of the federal government (including off-budget items) for the 1983 fiscal year will rise to $160-$170 billion, some $30-$40 billion higher than in the past fiscal year. Deficits in subsequent years are expected to be even larger unless additional steps are taken, and they remain an impediment to a further reduction of long-term inflation expectations.

Even if these deficits are not monetized to any significant extent, they represent a sizable call on private domestic savings and could be a key obstacle to lower real interest rates. To ensure a further reduction of interest rates — especially long-term rates that are critical to business investment decisions — significant headway in reducing the prospective deficits must be made. As Congress returns following elections, it is particularly important that members seize the initiative in putting Social Security on a sound financial footing and that the Administration be prepared to compromise on defense spending.

Further action on the fiscal front is essential to maintain the gradual downward trend of interest rates that is vital for a noninflationary recovery and also to alleviate the external debt burden of the developing countries. With the non-OPEC LDCs facing a total external debt outstanding to banks alone approaching $300 billion, a substantial drop in the average level of interest rates from over 15% last year to about 10% would save $10-$15 billion in their interest payments alone. This would help cushion the impact of a significant slowdown in international lending now under way.

New German government policies and the mark

The change of government in Germany on October 1 resulted mainly from dissatisfaction with the country's economic performance. Unemployment, which has risen from under 3½% in 1980 to 7.3%, inadequate investment, ballooning government spending, and growing budget deficits have caused increasing public concern. It was disputes over the budget that led the Free Democrats to end their 13-year coalition with former Chancellor Schmidt's Social Democrats and form a new center-right coalition with Chancellor Kohl's Christian Democrats and their Bavarian allies, the Christian Social Union. New elections are expected next March, and major policy decisions may well be postponed until after that.

Despite these political developments, the improvement in Germany's current account over the

Table 3

Germany's current account trends

billions of dollars

	Annual averages			Forecast
	1969-73	1974-78	1979-81	1982
Trade balance (FOB-CIF)	6.3	17.1	9.8	22.0
of which:				
Energy	—2.4	—12.5	—30.7	—30.0
Food, raw materials	—8.9	—15.2	—20.8	—19.0
Manufactures	17.6	44.8	61.3	71.0
Trade balance (FOB-FOB)	8.2	20.4	15.2	26.0
Invisibles balance	—6.4	—14.1	—25.1	—26.0
of which:				
Services	—2.7	—6.6	—12.9	—14.0
Transfers	—3.7	—7.5	—12.2	—12.0
Current account balance	1.9	6.3	—9.9	0.0

Table 4

Germany's invisibles account

1979-81 average, billions of dollars

Total	—25.1
Services	—12.9
Transfers	—12.2
of which:	
Workers' remittances	—3.8
Other private	—1.7
Net European Communities	—2.5
*Direct aid**	—0.9
Other official	—3.3

*Including debt cancellations.

past two years, and the recent sharp fall in dollar interest rates, the mark has fluctuated in the 2.49-2.56 mark/dollar range since October 1. At its current rate of 2.56, it is 12% below its end-1981 level. But in contrast to their attitude last year, German officials do not appear especially concerned about the dollar's strength.

One reason for the more relaxed attitude is that fears about the inflationary impact of a strong dollar have been dampened by the fall in the prices of oil and other primary commodities and by the drop in mark prices of imports from other countries. Overall, German import prices in mark terms have barely risen this year.

At the same time, the dollar's strength helps preserve some cost competitiveness for Germany in the face of the mark's appreciation this year against most other major currencies. It is up 11% against the French franc, 7% against the Italian lira, 13% against the Belgian franc, 8% against the Swiss franc, and 11% against the yen. On a trade-weighted average basis the mark has appreciated by 5½%. Even on a real effective basis it is up 2½% since December 1981 and is close to its average level in the second half of the 1970s. Indeed, the mark is currently nearly 4% above its real effective level in 1972, the base period German officials regard as most appropriate for judging whether the mark is properly valued to ensure adequate price and cost competitiveness in world markets.

Further devaluations of European currencies could increase the competitive pressure on German industries. Sweden's recent 16% devaluation exceeded significantly what was needed to correct the country's adverse inflation differential, and others may be tempted to follow suit. Market operators suspect there may be a need for a similar, if smaller, move by the Danish krone, which could lead to a general realignment within the European Monetary System and further upvaluation of the mark.

German exports, which had been a principal area of strength in the economy earlier this year, have started to weaken. Export orders in July/August were down more than 12% in volume from their peak last winter, while export deliveries were down 3.2% in value and 5.7% in volume from the first half of 1982. The decline in value involved shipments worldwide: exports to EC countries were off 1.4%; to the United States, 3.3%; to other industrial countries, 2.7%; to Comecon countries, 1.1%; to non-OPEC LDCs, 7.8%; and to OPEC, the source of 1981's most vigorous run-up, 13.7%. Together with the continued slump in domestic demand, export weakness has produced a renewed downturn in the German economy, and real GNP for the year as a whole could be off 1%. Another result of export weakness is the leveling out of Germany's current account. After returning to a surplus in the fourth quarter of 1981, the current account slipped back to near-balance (seasonally adjusted) in the third quarter of 1982.

Limited current account improvement

The limited improvement of the current account reemphasizes certain structural weaknesses. The large deficits in all sectors but manufactures trade have not diminished between 1979-81 and 1982 (see Table 3). In mark terms they are larger. The manufactures improvement, which accounts for the full $10 billion current account gain between 1979-81 and 1982, is also far from secure.

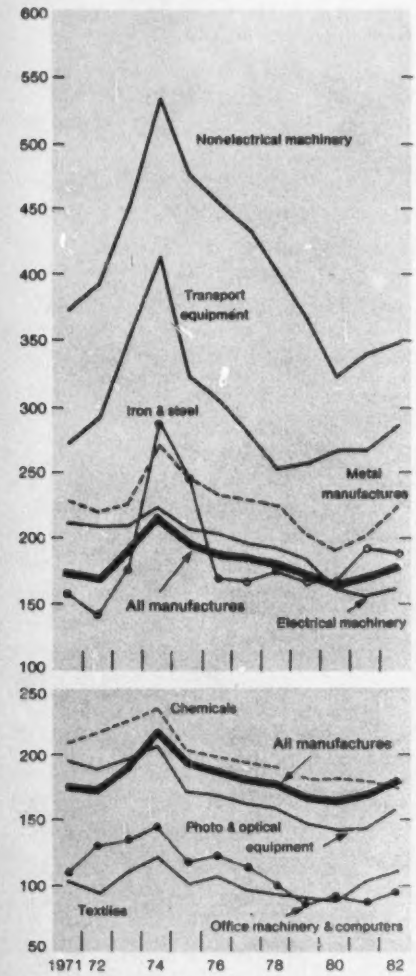
The transfers deficit is projected at $12 billion, including a $4 billion

outflow from repatriation of earnings by foreign workers in Germany, large and growing official transfer outflows of $2.5 billion to finance the European Communities' budget, and $1 billion of bilateral aid to developing countries (see Table 4). The total services deficit will be close to the $12½ billion of net overseas travel spending. However, there are also deficits in such other private services as transport, insurance, commissions, and licenses (representing technology); these are offset by the $4 billion of NATO spending in Germany (see Table 5). In addition to the invisibles outflow, deficits in the merchandise trade account for food and other raw materials and for energy are $20 billion and $30 billion, respectively.

The rebound in manufactures trade remains insecure because of its dependence on the low mark real exchange rate of 1981 (partly undone since then by appreciation), on the stagnation of imports, and on the performance of older industries. The export/import ratio in manufacturing is back to 177% in the first eight months of 1982 from its low point of 161% in 1980. It is just below the 178% achieved in 1978 — the last year of German current account surplus — but well below the peak levels of the mid-1970s (see chart). With the 1980-81 depreciation of the mark and the upsurge in shipments to OPEC, exports rebounded in 1981 and early 1982, when they were up 15% in volume over 18 months.

The manufactures trade improvement has also owed much to the restraining effect on import growth of the economic stagnation that has gripped Germany since early 1980. Now that world trade generally has moved into decline and the real effective mark exchange rate is again high, the export/import ratio is unlikely to improve further — and it could worsen.

German industrial trade
exports as percent of imports



*First eight months.

The pattern of change by industry reveals a concentration of recent strength in older industries. The sectors that have done well — where the export/import ratio has returned to the 1978 level or above — include transport equipment (mainly cars and trucks), clothing and footwear, textiles, iron and steel, and metal manufactures. For the auto industry 1978 was the low point, with Volkswagen's U.S. start-up cutting exports of fully assembled cars. Recently, vehicle sales have been boosted by the surge of French imports. Textiles, iron and steel, and, to some extent, metal manufactures are older industries with relatively homogeneous products, where the price advantage from the low mark real exchange rate in 1981 was perhaps particularly important. In these industries, as in clothing and footwear, Germany's future prospects for growth can be only modest, set against more competitive supply from Japan and newly industrialized countries as well as the proliferation of import restraints in foreign markets.

In the two higher-technology industrial groups shown in the chart — office machinery and computers and photographic, scientific, and optical apparatus — the export/import ratios, already well below the German industrial average, have only just managed to return to the 1978 level despite rapidly growing world markets for these products. Meanwhile, in Germany's "medium-technology" industrial staples — chemicals, electrical, and nonelectrical machinery — export/import ratios in 1982 remain well below the 1978 level.

The roots of current account problems

To some extent, the deficits in services, transfers, food, and energy

Table 5

Services trade comparisons

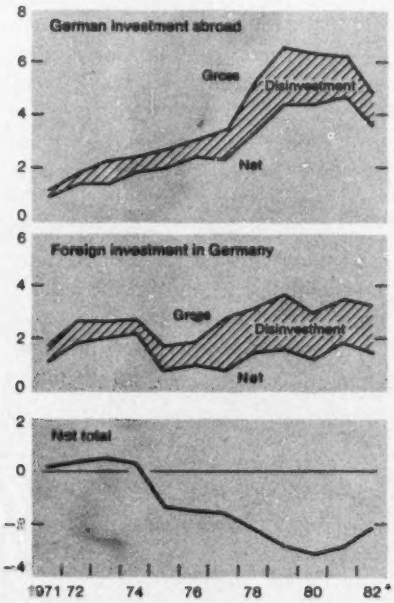
1979-81 average, billions of dollars

	Germany	U.S.	U.K.
Tourism	—12.5	—4.2	0.5
Transport	—0.8	0.6	0.9
Insurance	—0.4	0.2*	1.1
Commission fees, etc	—3.0	0.1*	—1.3
Personal services	—1.2	n.a.**	n.a.**
Licenses, patents	—0.8	6.0	0.4*
Government	4.2	—7.6*	—0.8
Investment income	1.0	31.4	1.1
Other services	0.6	8.5	7.8
Total	—12.9	35.0	9.7

*1979-80 only.
**Included in other services.

Direct investment

in billions of dollars



*First seven months at annual rate.

represent the workings of comparative advantage and disadvantage in the German economy and the country's lack of natural resources. But government policies have also contributed to the undue dependence on traditional manufacturing. The food deficit is exacerbated by the government's acquiescence to the European Communities' Common Agricultural Policy (CAP), which puts a protective tariff wall around European agriculture and maintains prices well above world market levels. Aside from raising the German food import bill needlessly and hence the general price level, the CAP accounts for the bulk of the $2½ billion transfers deficit with the EC.

Germany's lack of indigenous oil and gas is not being countered by vigorous exploration of the nonfossil alternatives, primarily nuclear power, because of obstruction from environmentalists. On the demand side, while there has been no attempt to shield consumers from higher energy prices, taxes on oil products have been low by European standards. Conservation has not proceeded as vigorously as it might have, and oil consumption has fallen less in relation to GNP than in Japan, France, and Britain.

The wide range of service deficits in Germany is in contrast with a preponderance of surpluses in the United States and the United Kingdom (see Table 5). Government policy needs to remove obstacles to the development of sophisticated modern service industries. In particular, the establishment of major international financial centers in Germany, dealing both in marks and Eurocurrencies, would permit greater depth and variety in the financial system, with a boost to service earnings such as has been enjoyed by the City of London, whose total net earnings excluding investment income is some $4½ billion a year.

Investment climate

The most serious obstruction to the development of modern sectors of the economy has been a worsening of the investment climate. This has resulted from restrictions on management flexibility and the redeployment of labor, from "crowding-out" in financial markets by government deficits, and from the greater attractions of overseas investment. Net business investment — after allowance for replacement of depreciated assets — fell from 3½%-4% of GNP in 1964-73, before the first oil shock, to ½%-1% of GNP in 1974-81, and even less in 1982. Present levels of investment are hardly enough to preserve competitiveness in the existing productive capacity of the economy, let alone finance a shift into new, modern enterprises.

In the mid-1970s, 50% labor force representation on the supervisory boards of German companies — industrial "codetermination" — was extended from the coal and iron and steel industries to all sectors. Many industrialists claim that this is slowing the adjustment in existing industry by reducing management flexibility and speed of response to changed circumstances, particularly in the redeployment of labor. Against this, advocates of codetermination cite the experience of the 1950s when the labor forces in coal mining and iron and steel were drastically pruned and redeployed into the rapidly growing engineering and auto sectors. The redeployment of industrial capacity and labor needed now is much more complex and varied. Labor representatives in the management of older industries are slow to accept necessary closures and job losses. This problem was ameliorated in the mid-1970s by laying-off and returning home about a half million foreign guest-workers. But the two million now remaining

have established positions and rights, and they are often doing jobs that others refuse to do.

A major reason for inadequate investment has been the shortage and high cost of funds for industry. With the customary flow of external finance originating in household savings increasingly preempted by budget deficits, resulting higher real interest rates have reined back business investment. Government current spending has risen from 32% of GNP in 1970 to 44% in 1981. Total government-sector outlays, including investment spending and subsidies to investment, have risen from 38% to 49% over the same period. Tax revenues were raised by less than government spending, so that government accounts swung from slight surplus in 1970 to a deficit of 4% of GNP in 1981.

The weakening of German industry during the 1970s and early 1980s has had an unfavorable effect on not only the current account but also overseas direct investment flows. The high valuation of the mark in the mid-to-late-1970s and the passage of the codetermination law contributed to a shift from net direct investment inflows through 1974 to net outflows since 1975 (see chart). The surge of German net investment abroad since the early 1970s has slackened only in 1982, no doubt discouraged by the high value of the dollar and poor growth in the United States and by the worsening prospects of the developing countries. Nevertheless, investments in the United States are still being sought because of the large market and positive business climate with fewer restrictions on profit opportunities. Foreigners' net direct investment in Germany declined sharply in the mid-1970s, and it has recovered only partly since then. It remains well down in real terms, reflecting an unfavorable assessment of the German business climate.

New policies and outlook

The new government has made reduction of the government deficit a welcome first priority in its economic policy. Significant cuts in social security benefits and postponement of cost-of-living increases should yield DM 5½ billion in savings in 1983 and reinforce the intended reduction in real current government consumption. In July 1983, the value-added tax is scheduled to be raised by 1%, although this is to be offset by some business tax reductions. The 1983 tax on high incomes, however, will be effectively raised 5% by an interest-free government assessment to be returned to the taxpayer before 1990. These measures could reduce the total government borrowing requirement, but the loss of tax revenue and increase of unemployment spending caused by the recession could render the reduction small.

The major force favoring Germany's international competitiveness will continue to be the low inflation rate. Now back below 5%, compared with about 8% for the average of its trading partners, German inflation could fall significantly further during the next 12 months. This excellent performance, however, should not be allowed to obscure the need for strong policy action to ensure rapid improvement in productivity and diversity in the real economy. Clearly the budget problem can be solved only with long-term budgetary discipline. This means further substantial spending cuts on a regular basis for some years, possibly backed up temporarily by tax hikes beyond next year's intended VAT increase to cut the deficit and reduce crowding-out of business borrowers in the financial markets. Meanwhile the correction of the current account imbalance through deflation has been taken as far as it can be. Cyclical adjustment now needs to give way to structural changes, with alterations in policy to improve labor mobility, encourage service and high technology industries, and reduce deficits in energy, food, and EC transfers.

Statistical appendix

for key to data in tables see pages 18 and 19.

Effective exchange rates, 10

Real effective exchange rates, 10

Eurocurrency market size, 11

Eurocurrency deposit rates, 11

Eurocurrency bank credits, 12

International bond yields, 12

New international bond issues, 13

Central bank discount rates, 14

Day-to-day money rates, 14

Treasury bill rates, 15

Representative money-market rates, 15

Commercial bank deposit rates, 16

Commercial bank lending rates to prime borrowers, 16

Domestic government bond yields, 17

Domestic corporate bond yields, 17

Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1981																
November	107.6	84.7	121.1	76.9	137.2	82.8	46.1	106.2	118.8	187.7	122.4	87.5	106.2	81.5	82.2	63.7
December	107.7	84.9	123.9	77.7	137.0	82.4	46.0	104.9	118.8	186.4	122.0	86.4	107.7	81.3	81.2	63.2
1982																
January	109.2	84.6	121.5	78.0	137.0	81.9	45.9	104.6	118.7	186.2	122.2	85.6	107.8	81.4	80.8	63.2
February	112.3	83.5	117.6	78.5	136.8	81.8	45.9	102.0	118.8	186.8	121.9	84.5	108.8	81.6	80.7	63.3
March	114.1	83.3	115.6	78.0	139.1	81.9	45.6	95.8	120.6	190.0	122.4	83.1	109.6	81.9	80.1	61.9
April	115.2	83.2	115.0	77.5	140.4	81.6	45.2	95.1	120.3	185.0	123.1	82.9	110.0	81.8	80.3	61.8
May	113.6	82.3	117.2	77.4	141.6	82.3	45.2	95.7	120.7	180.9	123.8	84.1	109.2	81.4	79.3	62.1
June	118.8	80.2	112.9	78.5	142.0	78.9	45.0	95.4	121.6	178.1	123.8	82.5	110.1	81.9	80.2	61.4
July	119.9	80.7	112.1	78.8	142.6	76.8	45.1	95.6	122.0	179.7	124.1	82.0	108.8	82.0	79.3	61.1
August	119.8	82.5	110.9	78.9	142.8	76.5	45.0	95.3	122.8	179.6	124.3	81.7	104.2	82.7	77.3	61.2
September	120.4	83.3	109.7	79.2	143.2	75.8	45.0	94.8	123.6	179.1	124.6	81.3	102.0	82.6	76.4	61.4
October	121.8	83.9	107.3	79.9	144.2	76.0	44.7	94.5	124.9	179.6	125.4	83.3	102.0	73.7	76.5	61.1
September 3	119.6	83.0	111.2	78.9	142.8	76.0	45.0	95.3	123.5	179.7	124.4	81.5	104.2	82.9	76.4	61.2
10	119.8	83.1	110.9	79.2	143.3	75.5	45.0	95.3	123.6	179.5	124.6	80.7	101.6	82.8	76.4	61.4
17	120.5	83.3	109.8	79.1	143.1	75.5	45.0	95.1	123.8	179.5	124.6	80.9	101.4	82.7	76.3	61.3
24	120.3	83.7	109.3	79.1	143.3	75.7	45.0	94.7	123.7	178.9	123.7	81.6	101.6	82.5	76.3	61.5
October 1	121.4	83.5	107.9	79.1	143.2	75.6	45.0	94.2	123.9	178.3	124.5	81.6	102.0	82.7	76.5	61.4
8	121.9	83.4	107.1	79.5	143.5	75.6	44.9	94.1	124.3	178.6	124.5	81.9	101.6	80.4	76.5	61.3
15	120.9	84.0	109.0	80.2	144.7	76.1	44.7	94.5	125.0	181.2	125.5	83.5	101.1	70.9	76.3	61.4
22	121.6	84.2	107.5	80.1	144.5	76.2	44.5	94.6	125.1	180.1	125.8	84.2	102.4	70.7	76.4	60.9
29	122.7	84.3	105.7	79.8	144.3	76.1	44.5	94.8	125.4	178.8	125.9	84.1	102.8	70.8	76.7	60.8

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1978	96.3	92.1	106.9	106.3	103.5	97.4	89.8	98.6	104.1	124.0	109.1	102.7	98.0	96.4	89.5	97.2
1979	96.3	92.1	95.7	118.4	103.9	98.9	93.0	95.8	100.5	116.8	107.6	100.7	92.6	99.0	88.2	109.0
1980	98.0	91.3	93.4	137.9	100.8	100.6	95.9	90.6	97.1	106.5	108.2	93.3	94.8	100.5	89.7	103.1
1981	108.7	91.4	94.3	140.9	96.6	98.9	91.2	85.0	93.1	105.5	106.1	89.1	99.2	101.3	98.9	97.6
1981																
November	109.4	92.8	91.4	133.8	98.8	98.0	89.1	84.2	94.7	115.0	106.3	90.4	99.5	95.3	100.9	97.5
December	109.3	93.1	93.3	135.2	98.6	97.6	89.4	83.7	94.1	113.9	106.0	89.7	100.2	95.3	99.5	97.8
1982																
January	110.8	92.8	90.5	135.9	98.1	97.3	89.7	82.7	95.5	112.4	106.3	87.6	102.2	96.7	99.7	98.5
February	113.2	92.0	87.4	136.7	97.1	98.5	90.5	80.5	95.4	112.2	106.0	86.6	103.5	97.6	101.0	99.1
March	114.4	92.3	85.7	135.6	98.1	98.4	90.1	77.5	96.3	114.0	107.3	85.8	102.9	98.2	101.1	97.8
April	114.8	92.9	85.1	134.8	98.5	99.0	89.5	77.1	96.0	111.0	107.7	86.2	103.9	98.1	101.8	98.4
May	112.8	92.1	86.4	134.4	99.0	100.7	89.7	78.0	96.1	108.6	107.9	86.8	103.5	97.7	101.1	99.7
June	118.6	89.4	82.5	136.3	99.9	98.4	88.9	77.6	96.6	107.1	107.3	86.3	103.2	97.7	102.6	99.1
July	120.5	89.3	81.3	137.0	99.9	94.3	89.3	77.6	96.5	107.4	107.6	85.9	101.9	98.3	102.0	99.2
August	120.5	90.8	80.4	137.1	99.9	93.8	90.2	77.2	96.8	107.2	107.4	86.1	97.8	98.9	99.6	100.4
September	120.1	92.7	79.3	137.7	100.1	93.1	89.8	77.1	97.5	107.3	107.3	86.3	96.0	98.8	99.2	101.7
October	122.7	92.5	76.8	138.8	100.7	93.7	89.1	76.7	98.2	107.3	107.7	88.7	95.4	88.0	99.5	101.7

Eurocurrency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Netherlands Antilles, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
										Mar r	Jun p
Estimated size											
Gross	315	395	485	595	740	950	1 235	1 525	1 860	1 930	1 900
Liabilities to nonbanks	55	80	90	115	145	190	260	345	440	455	n.a.
Liabilities to central banks	40	60	65	80	100	115	145	150	130	120	n.a.
Liabilities to other banks[a]	220	255	330	400	495	645	830	1 030	1 290	1 355	n.a.
Net	160	220	255	320	390	495	590	730	890	900	905
Claims on nonbanks	70	105	130	165	210	265	330	425	530	540	n.a.
Claims on central banks and on banks outside market area[b]	70	95	105	130	150	185	200	230	275	275	n.a.
Conversions of Eurofunds into domestic currencies by banks in market area[c]	20	20	20	25	30	45	60	75	85	85	n.a.
Eurodollars as % of gross liabilities in all Eurocurrencies	74	76	78	80	76	74	72	75	78	79	n.a.

a includes unallocated liabilities
b includes unallocated claims
c in European market area only
r revised
p preliminary

Eurocurrency deposit rates

prime banks' bid rates in London, at or near end of month

	1978	1979	1980	1981	1982						
	Dec	Dec	Dec	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep
Eurodollar:											
overnight	10.62	14.00	19.25	12.87	15.62	15.62	13.62	14.88	11.50	9.00	10.50
7-day fixed	10.62	14.00	19.75	13.00	15.37	15.25	14.00	15.38	11.75	9.25	10.50
one month	11.00	14.37	19.12	13.31	15.31	15.06	14.38	15.44	12.13	10.94	11.00
three months	11.69	14.44	17.55	13.75	15.37	14.94	14.38	15.81	13.06	11.88	11.44
six months	12.31	14.44	16.37	14.81	15.44	14.87	14.44	16.00	13.38	12.44	11.94
twelve months	12.00	12.87	14.87	14.75	15.31	14.63	14.44	16.00	14.06	12.87	12.19
Euromark:											
one month	3.19	8.50	8.87	10.44	9.13	9.00	8.56	8.87	8.87	8.12	7.62
three months	3.31	8.56	8.87	10.50	9.13	8.87	8.56	9.00	8.87	8.19	7.75
six months	3.69	8.56	8.87	10.56	9.13	8.81	8.56	9.12	9.12	8.44	7.94
twelve months	3.81	8.12	8.93	10.25	9.13	8.50	8.50	9.25	9.12	8.44	7.94
Euro-Swiss franc:											
one month	—.06	5.19	6.00	8.87	4.81	3.62	3.63	4.37	3.25	3.25	3.81
three months	0.00	5.75	6.00	9.25	5.50	4.31	4.25	5.06	4.25	4.00	4.37
six months	0.12	5.87	5.75	9.25	5.81	5.00	4.94	5.94	5.12	4.88	4.81
twelve months	0.62	5.56	5.50	8.50	6.13	5.37	5.06	6.00	5.12	4.94	4.81
Eurosterling:											
one month	12.00	16.75	14.75	15.37	13.50	13.50	13.37	13.00	11.88	11.00	10.88
three months	12.62	16.75	14.75	15.69	13.50	13.62	13.37	13.06	11.81	10.81	10.50
six months	13.25	16.75	14.25	15.69	13.56	13.62	13.37	13.06	11.81	10.81	10.50
twelve months	13.00	15.25	14.00	15.37	13.56	13.69	13.37	13.13	11.94	10.81	10.50
Euro-French franc:											
one month	10.50	13.87	11.12	15.75	29.00	21.50	29.50	15.50	14.75	21.00	16.25
three months	9.87	14.00	11.75	17.00	22.50	22.00	26.75	16.75	16.00	23.75	18.00
six months	9.87	14.12	12.25	18.00	20.50	21.75	23.75	18.00	17.37	22.75	19.00
twelve months	10.25	13.75	12.87	18.25	19.50	19.75	23.75	18.63	18.00	21.00	19.25
Euroyen:											
one month	—.69	7.32	9.12	6.12	6.75	6.87	7.06	7.25	6.69	7.06	7.00
three months	0.62	8.31	9.25	6.12	6.75	6.94	7.12	7.25	7.12	7.31	7.25
six months	1.87	8.62	9.62	6.87	6.81	6.94	7.12	7.31	7.38	7.44	7.50
twelve months	2.19	7.94	9.37	6.87	6.81	6.81	7.38	7.25	7.12	7.44	7.56

Eurocurrency bank credits

publicly announced in period, in millions of dollars

	1979	1980	1981	1982			Jan-Oct	
				Augr	Sepr	Octp	1982	1981
Industrial countries	**27 248**	**39 100**	**86 022**	**2 216**	**8 813**	**2 677**	**38 498**	**76 316**
Australia	941	2 475	1 680	26	398	310	4 296	849
Canada	1 845	1 743	4 112	—	1 000	443	3 778	3 990
Denmark	1 205	1 720	1 661	—	—	—	770	1 274
France	2 955	1 745	3 912	—	4 000	168	5 520	3 412
Greece	1 009	1 333	1 039	—	—	—	750	1 014
Ireland	687	237	1 361	20	—	27	401	832
Italy	3 708	6 268	6 030	205	306	120	3 002	5 006
Norway	935	685	713	900	120	—	1 769	427
Portugal	887	745	1 590	—	80	42	1 158	1 330
Spain	4 184	5 457	3 242	173	100	—	1 227	3 085
Sweden	1 263	1 370	1 867	—	—	—	425	1 585
United Kingdom	795	1 470	747	278	—	738	1 555	560
United States	2 348	6 719	54 784	235	375	655	5 811	50 116
Others	4 486	7 133	3 284	381	434	176	8 036	2 856
Developing countries	**47 964**	**35 054**	**45 239**	**2 908**	**1 596**	**1 559**	**35 064**	**37 032**
Non-OPEC countries	35 411	24 009	33 369	1 240	1 240	748	23 977	27 699
Argentina	2 965	2 506	2 534	—	—	—	465	1 814
Brazil	6 278	4 158	5 751	389	401	515	4 818	4 720
Chile	867	1 322	2 204	80	4	—	886	2 044
Colombia	754	608	1 005	14	—	—	157	742
Korea	3 258	1 917	2 824	351	292	122	2 460	2 561
Malaysia	1 168	—	1 725	—	25	—	1 822	1 425
Mexico	8 243	5 971	7 530	—	—	3	7 488	6 550
Peru	596	480	1 407	—	175	—	1 029	1 107
Philippines	2 067	1 056	1 257	118	50	—	528	924
Taiwan	1 063	314	928	—	225	—	255	921
Other	8 152	5 677	6 204	288	68	106	4 066	4 891
OPEC countries	12 553	11 045	11 870	1 666	356	813	11 087	9 333
Ecuador	593	1 209	934	200	—	—	815	914
Indonesia	1 061	1 435	725	258	46	250	922	725
Nigeria	1 373	1 330	1 802	235	258	70	1 963	1 765
United Arab Emirates	401	101	363	—	—	—	93	363
Venezuela	6 830	6 715	7 559	823	52	493	6 328	5 349
Other	2 295	255	497	150	—	—	966	217
Communist countries	**7 325**	**2 809**	**1 791**	**—**	**38**	**—**	**672**	**1 371**
China	3 395	181	370	—	—	—	—	50
East Germany	796	303	470	—	8	—	8	470
Hungary	260	550	550	—	30	—	290	550
Poland	849	800	—	—	—	—	—	—
Otherb	2 025	975	401	—	—	—	374	301
International organizationsc	**275**	**429**	**302**	**—**	**—**	**—**	**150**	**70**
TOTAL	**82 812**	**77 392**	**133 354**	**5 122**	**8 447**	**4 238**	**74 384**	**114 789**

a includes multinational organizations *b* includes COMECON institutions *c* includes regional development organizations *p* preliminary
r revised

International bond yields

long-term issues, at or near end of month

	1978	1979	1980	1981	1982						
	Dec	Dec	Dec	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep
U.S. companies:											
U.S. dollar	8.55	10.13	11.76	12.70	12.96	13.04	13.02	13.41	13.33	13.04	12.92
Swiss franc	5.70	6.61	7.27	7.30	7.26	7.40	7.40	7.66	7.53	7.64	7.92
European companies:											
U.S. dollar	9.21	10.93	12.42	14.29	14.07	13.99	13.88	14.12	14.15	13.81	13.73
German mark	6.84	7.55	8.79	9.36	8.74	8.38	8.23	8.35	8.26	8.32	8.24
Governments:											
U.S. dollar	9.12	10.66	11.83	13.59	13.44	13.59	13.50	13.77	13.78	13.41	13.30